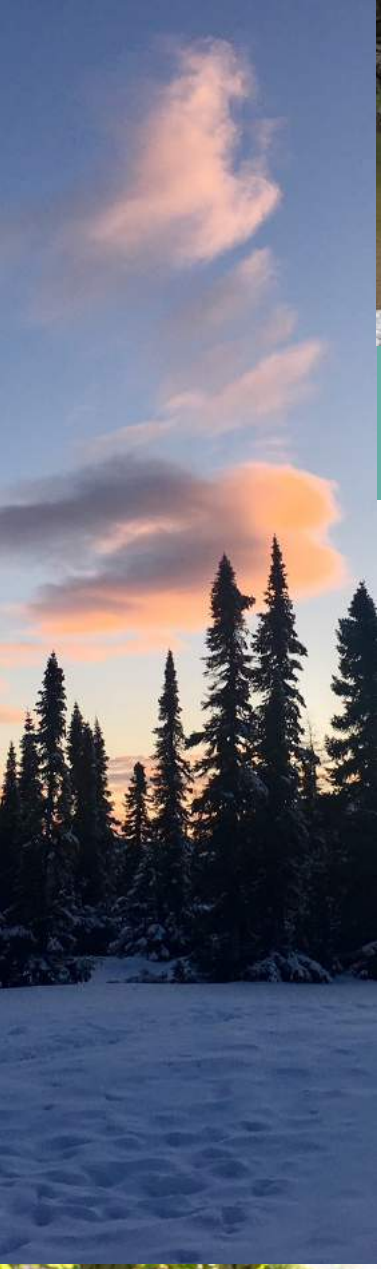


Career Spotlight Series

Indigenous Women in STEM

WISEatlantic

Women in Science and Engineering
NSERC CHAIR - ATLANTIC REGION

Contents

Introduction

Dear Reader:

I am so excited that you have picked up this booklet. This booklet profiles diverse Indigenous Women in STEM and is filled with inspiring stories about ordinary women who followed their dreams and passions to become successful scientists and engineers. Some of these women faced hurdles in their pathways, but they climbed over them with support from others, and have made it into these exciting careers.

This is the third booklet in our Science, Engineering, Trades and Technology (SETT) series.

We could not feature every woman in Science, Engineering, and Technology that we know in our booklet series, and have selected just a few to give you a snapshot into their lives and their career paths.

These booklets are also available on our website for download at www.WISEatlantic.ca

All the women featured were interviewed while working in Atlantic Canada. I hope you enjoy reading these wonderful stories.

Follow your passions and keep doing what you love to do, and you will find a fulfilling career suited to you!

Tamara Franz-Odendaal, PhD
Professor of Biology
Mount Saint Vincent University

Impact Assessment Specialist

Sara Rumbolt
Health Canada

Sara's current position is an Impact Assessment Specialist with Health Canada. Sara is responsible for reviewing major resource and infrastructure projects under federal regulatory review for potential risks to human health. Her work helps prevent, reduce and mitigate the potential effects that any change to the environment may have on human health.

Career/Educational Path

What led Sara to her career was her love of biology in high school. She felt biology just made sense and helped her understand how the world works. Sara enrolled in Memorial University (MUN) in Newfoundland and Labrador knowing she wanted to study science but was unsure of what career she wanted. She initially found the pace of exams difficult in comparison to high school, but settled in after finding better study and time management skills. After her first year at MUN, she applied to the pre-veterinary medicine program at Nova Scotia Agricultural College and worked as a veterinary technician during the summer. Quickly realizing that while she loves animals, veterinary medicine was not for her, so she returned to MUN to complete her Biology degree.

During one of her classes, a professor told her about a bursary program through the Newfoundland and Labrador government to become a public health inspector. She applied and after a competitive selection process, she was selected as one of three candidates for the bursary program. She enrolled in the Bachelor of Technology in Public Health (now called the Bachelor of Health Science (Public Health) at Cape Breton University and graduated in 2008. After completing a work term, submitting two technical reports and passing an oral exam, she became certified as a Public Health Inspector later that year. Job prospects and salary are very good in this field and she hasn't been unemployed for one day since she graduated.

Sara grew up in Mary's Harbour on the southeast coast of Labrador, Newfoundland & Labrador with a population of 475 and with only transportation by boat, twin otter plane and snowmobile connecting it to other communities. She went to the same school from kindergarten to grade 12, with only six people in her graduating class. She spent a lot of time outside snowshoeing, snowmobiling, ice fishing, boating and eating traditional food such as caribou, partridge berries and Atlantic salmon. Sara feels that growing up in a rural, remote community and then moving to a larger urban center has given her a unique perspective, which has helped her throughout her career.

Qualities and Skills

Qualities and skills that are a good fit for Sara's career are attention to detail, being self-assured, self-confident, good communicator, both orally and written, and personable.

Sara describes herself as analytical – she likes numbers and facts, but also has strong ethics, is detailed oriented, heartfelt, ambitious, likes stability and is very hard working. All these skills are very helpful when dealing with the protection of public health.

Sara's **day-to-day** is spent reviewing documents, attending meetings, writing reports, and collaborating with federal government departments and Indigenous communities. Sara's current position is heavily science based; she reads and analyzes environmental impact statements for potential risks to human health from project related activities and provides advice to regulatory authorities. This role is very different from when she worked as a health inspector, where she inspected restaurants, reviewed plans for septic systems, collected drinking water samples and examined lab results. She said the shift from being in the field early in her career, to working at a desk was very different and took some time to adjust to, but her past work experiences, as well as her upbringing, has helped her look at situations from multiple perspectives and help her see the bigger picture in her work today.

Sara is a member of the NunatuKavut Community Council (NCC) - the representative governing body for approximately 6,000 Inuit of south and central Labrador.

Career Highlights:

The most interesting project Sara has been involved with so far has been reviewing the **Boat Harbour** remediation project, as it was very scientifically complex and challenging. It is still in review.

Sara's favorite aspects of her job are the variety in the topics she deals with and being able to work with communities to understand their concerns in relation to projects.

Boat Harbour: Before 1967 Boat Harbour was a natural tidal estuary. It was a saltwater habitat spread over 142 hectares (350 acres). The estuary was connected to the Northumberland Strait by a narrow passage just east of Pictou Landing First Nation community. Since 1967 Boat Harbour has been receiving wastewater effluent from industry. In 1972, a dam was built cutting Boat Harbour off from the ocean. This turned the freshwater estuary into a freshwater lake. Since then, Boat Harbour has been receiving wastewater from Abercrombie Pulp Mill leading to contaminants settling in the sediment of the harbour.

What **surprised** Sara about her career is the variety of things she has been able to do with her biology and public health degrees. She said she didn't really know what she wanted to do when she started, but it has opened so many doors and opportunities to try new and exciting experiences.

Throughout Sara's career, she has taken on many different positions including health inspector, outbreak management, public health emergency response planner, environmental health consultant, communicable disease prevention and control coordinator, Indigenous consultation advisor, indoor air scientific evaluator, and was part of the co-ordination centre for the COVID-19 response.

Sara said she still doesn't know what she will be when she "grows up", but she likes that she still keeps moving and finding experiences that speak to her.

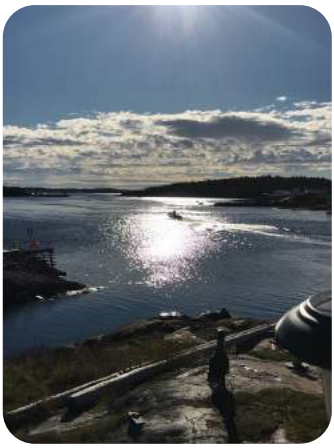
Career Impact

Sara's work as an Indigenous Consultation Advisor with Environment and Climate Change Canada (secondment position) and an Environmental Assessment Specialist with Health Canada (current position) helps society and communities by protecting people's health, and giving voice to the public.

Sara's advice for 14 year old girls is if you don't know what you want to be, but you like something, follow it with full intent and keep in mind what your job possibilities will be. Take calculated risks and don't be afraid to open another door to try something new. Follow your heart and don't give up.

Sara's program of study in Biology helped benefit her career as it teaches you to study and conduct research. Her Public Health degree was a very practical application of science that can be applied to a real-world setting.

Sara's vision or dream for women in her field is that girls have increased representation and opportunities and are aware of all of the possibilities available.



Mary's Harbour, Labrador, Nfld

Sara also said "you don't have to have aspirations to be an astronaut to pursue a career in science. There are many different facets of science that you can go in - you just need to find the one that speaks to you.

Also, if you find yourself in a career you don't love, do the best you can, but look for something else while still employed that speaks to you."

Biologist

Jennifer Sylliboy

Unama'ki Institute of Natural Resources

Jennifer is a Researcher & Program Manager - Integrative Knowledge Systems for the Aquatics Research and Stewardship team at the Unama'ki Institute of Natural Resources.

She manages projects related to aquatic species at risk, wetlands and habitat restoration.

Career/Educational Path

Jennifer always loved science and explored a lot of different educational and career paths before becoming a Biologist. Jennifer initially wanted to be a doctor but was tired of science when she finished high school, so did a Bachelor of Arts for two years at Cape Breton University, then changed to a math major, then pre-med, and finally switched her major to biology. During her last year of university she was getting ready for medical school but became pregnant so decided she couldn't continue with her studies. However, she did an Honors degree part-time and became a math tutor for three years in Eskasoni. Once her child was older, she completed a two-year Masters program at the University of Calgary in Sustainable Energy Development (SEDV).

While obtaining her undergrad, Jennifer quit a few times, and worked as a teachers aid, and even explored becoming an RCMP officer, but she ultimately decided to complete her BSc. Jennifer is from Eskasoni, but grew up in Millbrook, Truro.

It doesn't matter how long the road takes and if you change your mind don't worry about it.

The universe is a bigger version of ourselves, so it knows exactly what we need when we need it. Trust the universe. It's never too late.

On a daily basis, Jennifer can be seen taking samples in rivers, tagging salmon **kelt** (after spawning), tracking salmon migration to see where they go after leaving Cape Breton rivers, hosting workshops and meetings, conducting interviews with knowledge keepers, fishers, Elders, and youth on a number of different aquatic species important to Mi'kmaq people. In the summer she is responsible for the community aquatic monitoring program whereby twice a month from June to Sept they sample five different sites within the Bras'd'Or lakes watershed. They walk out into the water with a big net and corral fish into a bucket, count them, identify them, take pictures, and check out the aquatic vegetation, seaweed, and water substrate.

She also studies species at risk such as Atlantic salmon, Striped Bass, and American eel, to help them from being listed or becoming species at risk. Jennifer also studies land plants such as Black Ash, terrestrial plants, aquatic species, algae and seaweeds.

Jennifer's work is guided by the Mi'kmaq people so she determines what their priorities are with respect to aquatic resource management.

Qualities and Skills

Qualities and skills that are a good fit for Jennifer's career as a Biologist include being disciplined, having passion, liking the outdoors, being hands-on, enjoying training others, being open minded, and being of Mi'kmaq origin. Being Mi'kmaq helps with two-eyed seeing and being able to see the world in different ways than western sciences. She said it is important to see the bigger picture and how everything is connected.

Jennifer would describe herself as disciplined, punctual, social, a team player, good communicator, and laid back. She said she is not analytical or detailed and sometimes has to do data analysis but it's not one of her favorite tasks.

What is Kelt?
Kelt is a term we use to describe a post-spawn or spawned out Atlantic Salmon. Unlike their pacific counterparts, Atlantic Salmon do not all die after spawning.

Career Highlights

Jennifer's most enjoyable project so far was the Barachois Pond **Wetlands** project where she had to map out 400 ponds around the Bras'd'Or lakes and visit all of them, documenting and taking pictures. She said she really liked it and learned so much about the Bras' d'Or plants and wildlife and learned a lot of different skills like mapping, GIS software, Google Earth, and worked with really good people.

What is a wetland? Small little ponds connected to a larger body of water separated by a barrier beach.

Sometimes it's frustrating dealing with policy, or lack of policy around wetlands especially in First Nations communities where they don't fall under provincial rules policy. Therefore, Jennifer is trying to develop an Indigenous wetlands advisory committee to come up with a wetlands management plan for first nations communities.

The **favorite part of her job** is getting to connect with community members, listening to knowledge keepers and hearing their stories of how different life was over the decades; how species were in abundance and how the climate and environment has changed. She also likes engaging with the community and going into high schools to do education sessions. She said she likes that the students get to see they can do different careers, instead of just the typical ones, and tells students that science isn't as difficult as it sounds.

What **surprised** Jennifer about her career is how broad her work is and how she does so many different things. She said she has to know a little about everything. She originally thought she would be studying wetlands, but is also doing work with salmon, and conducting workshops. She is also surprised how difficult it is to find Mi'kmaq people with a science background to assist them. That is why she works hard to recruit young people into science fields.

Career Impact

Jennifer's program of study in Biology helps society and communities as a lot of her research is related to the environment and her Mi'kmaq people have a lot of culturally important species and rely on the land a lot. Jennifer's job is to advocate for any concerns Mi'kmaq people have with respect to aquatic species or the environment. For example, she was notified that Atlantic salmon and Striped Bass populations in Cape Breton were going to be potentially listed as species at risk. Atlantic salmon are very important to her people so she wanted to do everything she could to provide alternatives or prevent these species from being listed. She enlisted other fishermen for their help, conducted engagement sessions and provided recommendations for alternatives. Her work benefits the earth, rivers, lakes, land, plants, moose, forestry people, etc.

Jennifer's advice for a 14 year-old girl is to just go out and do it! It's not as difficult as it sounds. It may sound intimidating, but if you can get into the school, you can do the work. Have confidence and don't be scared. Even if you fail, you still learn something. You can always find support to help you succeed and put you on the correct path. Persevere. The world is transitioning into accepting and including indigenous perspectives into everything we do and are seeking out indigenous people for the answers to a lot of the worlds' problems that Western science *hasn't been able to solve yet.*

Jennifer's program of study in biology benefited her career as it made her love biology and science even more and she wouldn't be in the career she is now without it.

Jennifer's **vision or dream** for women in her field is that more girls grow up and be scientists and engineers, and do meaningful, spiritually rewarding work.

Other advice is to be proud. Embrace being Mi'kmaq, get to know your culture and who you are as a people. Understand two-eyed seeing. Talk to your Elders, get to know your community, get to know your people.

Janna MacKay,
Confederacy Mainland Mi'Kmaq

Janna's current title is Senior Director of Health and Social Services at the Confederacy Mainland Mi'Kmaq. She is in charge of the oversight and operations of Health and Social Services Department.

Janna has been a practicing dietitian for 12 years and is a member of Pictou Landing First Nation.

Career/Educational Path

What led Janna to her career as a dietitian was her love of chemistry in high school and the fact that she excelled at it. She enrolled in Chemistry at St. FX University but in her third year decided she didn't want to be a chemist. A close friend suggested she try a nutrition course and she really enjoyed it so she switched majors. A lot of her chemistry courses were transferable. She still wasn't sure if she wanted to become a dietitian so she did a grant program with Health Canada where she job shadowed with dietitians to see if she wanted to pursue that path. She decided she did like this career path and applied for a postgraduate internship, which she completed over 49 weeks with the Yukon First Nations Dietetic Internship program, in Whitehorse, Yukon.

Janna was always interested in Sports Nutrition so took a short course through Dietitians of Canada in Sports Nutrition. That led her to taking a part-time diploma in Sports Nutrition with the International Olympic Committee which then translated into a Masters of Science degree in Sports Nutrition at the University of Stirling in Scotland. After the internship (Whitehorse), she wrote an exam and then became registered.

After Scotland, she worked as a diabetes dietitian in a small community in Inuvik NWT, 200 kms above the Arctic circle, for three years. Janna said it was an awesome experience but missed her family so came back to Nova Scotia and worked with the federal government as a Community Nutrition Advisor focusing on diabetes programs.

Janna is a member of Pictou Landing First Nation and grew up in Little Harbour, Pictou County and attended a small high school.

On a daily basis, Janna manages a staff of 20 which can include overseeing the department's day to day operations, leading team meetings, responding to staff questions and advice, attending management meetings and regional tables, human resources functions and strategic planning, as well as direct service delivery to the community.

Janna also provides health advisory supports to the CMM (Confederacy of Mainland Mi'kmaq) community health centres.

Qualities & Skills

Qualities and skills that are a good fit for Janna's career include leadership skills, continuous learning, curiosity, problem solving, empathy and compassion, team player, collaboration, being able to work across different programs, and departments to advance health outcomes for the populations you are serving.

Janna describes herself as empathetic, an objective thinker, who can see multiple points of view, and thinks outside the box. Because of her previous roles as a dietitian, she can see the bigger picture which helps her in an advocacy role.

Career Highlights

The most interesting and exciting project Janna has been involved with so far was the development of a set of education resource booklets for Dairy Farmers Canada for use in schools. The booklets focused on different grade levels and Mi'kmaq characters. It was interesting to be part of such a large-scale project that included illustrators, artists, technical experts, and publishers. It took two years to see the finished product but felt good that it is something she was able to contribute to.

Janna's favorite part of her job is working with the First Nations communities and working with her team. She appreciates the responsibility of representing the eight CMM communities and bringing forward their concerns and a strategic voice at the table where change is occurring. This role is providing her with lots of professional development opportunities and she is using transferable skills learned in her science background such as analyzing problems, thinking about different solutions, trying to be objective with all information, and asking relevant questions. Having a science background has helped especially in her role during COVID.

Another project she enjoyed was the creation and development of the Micmac Health Authority – Tajikeimɨk. She was part of the conversations that were led by 13 Mi'kmaq communities, health directors, chiefs, and tribal councils.

The COVID-19 pandemic also provided an opportunity to have a voice of Tajikemik at various tables when it came to COVID response in the first nation communities.

What surprised Janna about her career in dietetics was that she didn't anticipate all the potential areas where dietitians could provide influence. She assumed a Clinical Dietitian would work one-on-one with clients or in a hospital setting, but as she got into the workforce her job was more community nutrition, as well as government focused. Janna has only been in her current role for one year but can see how different science backgrounds can excel in this role. Janna's health background has helped support her in this position such that a candidate who didn't have a science background might not have been able to excel in the same way.

Career Impact

Janna's program of study has enabled her to help society and communities by bringing the health priorities of the eight First Nation communities of mainland NS to the appropriate tables, to advocate on their behalf. Health transformation and changes to health outcomes is a slow process. She takes direction from the eight communities as they know their health priorities best and she is like a vehicle to bring forward their concerns, advocate on their behalf, and support them in funding applications etc. It's fulfilling work as she can see communities flourish and health outcomes improve.

Janna's program of study in Human Nutrition helped benefit her career – by giving her the background as a health professional for the role she is currently in. Her science background assists her to use a health systems lens to understand social determinants of health and indigenous determinants of health. She is able to take that analytic, objective lens to problems and ask the right questions to trouble shoot problems and find solutions.

Janna says "don't feel like you have to make the decision at 15 – it's okay to change careers and it's okay to fail. It's Okay to be 30 and decide you want to become an engineer. It's okay to make those changes. You are not stuck in this lane for the rest of your life!"

Janna's **vision or dream** for women in her field for the next 25 years is to see more diversity in STEM, not just women. She tries to encourage more indigenous youth to go into science careers. She sees more indigenous youth getting into medical fields – doctors, physiotherapists, occupational therapists, with the long term vision of hiring their own to provide services.

Janna's advice for 14 year old females is to look outside of your community and get exposed to different careers to see available opportunities. Attend career fairs, retreats, camps and find people to look up to. Find opportunities to job shadow, attend "bring your kid to work day", reach out to people in a field you may be interested in.

Explore different mentorship opportunities, different scholarship grants, or funding pots designated for indigenous students. Check with local band or native employment officers. ASK.

Civil Engineer (Student)

Kalolin Prosper

Civil Engineering Student & Student Project Engineer/Project Coordinator at Lindsay Construction

Civil Engineering Student at Dalhousie University and summer engineering student at Lindsay Construction, working in design and project management.

Career/Educational Path

Kalolin wasn't sure what she wanted to do after high school, so she thought about the things she liked to do as a child. She liked building houses and making blueprints in the dirt with rocks and sticks, DVD cases and Legos. Since she was interested in building, she thought she would like to do architecture so started with an arts program and took some architecture courses. She realized it wasn't for her so switched to Sciences with the idea of going into Engineering, as she still wanted to be involved in the building aspect in some form. She figured if she didn't get into Engineering, science would be a backup plan.

Kalolin had to take extra high school equivalent courses to get into the Engineering program. When faculty and student advisors suggested engineering, she wondered if she was smart enough and when some people thought she shouldn't go into engineering and to start smaller, she wasn't interested in starting smaller. She wanted to put all her efforts into something she would genuinely enjoy. She said her education took a bit longer, but it is worth it.

Kalolin is currently doing her Civil Engineering degree at Dalhousie University which takes four years, or five, if you choose to take the co-op option. Co-op is usually in four-month intervals with options to do an eight-month program, depending on the company.

You can start taking courses in engineering at several post-secondary institutions in Atlantic Canada but to complete a full Engineering degree (BEng) you have to complete your studies at Dalhousie, Memorial University, UNB or UPEI (only for certain fields of engineering). After the first year you decide what discipline you want to get into, but in the final semester students start to branch off. In the third year everyone branches off into their own discipline.

Kalolin opted out of the co-op option as she is working in design and project management and gaining a variety of experiences every summer working at Lindsay Construction. Kalolin takes direction and tasks from the Project Manager who delegates such things as uploading drawings into the Lindsay portal system, distributing materials to tradesmen and engineers on site, attends meetings, and conducts weekly onsite visits to ensure projects are moving forward.

Kalolin grew up on a reservation called Paqtnkek Mi'kmaq nation near Antigonish, Nova Scotia and went to a small primary-12 school.

Qualities & Skills

Qualities and skills that are a good fit for a career in Civil Engineering include good people skills, detail oriented, analytical and being able to take constructive criticism.

Kalolin describes herself as extremely dedicated and doesn't do anything halfway. She is self-motivated and brings this motivation into all areas of her life including her education, spiritual, physical and mental well being. She says "I am not a human calculator and I am not the best at mental math, but I work very hard". She is also analytical and detail oriented, and very friendly which she says is important in this career because having good working relationships and getting to know as many people as you can will benefit you in your career.

Career Highlight:

Kalolin's most enjoyable project at school thus far was to create and develop a strawberry trimmer for an actual client. She worked in a team with other students in various engineering fields and with the client to determine what they wanted in a strawberry trimmer and how they wanted it to operate. Her team designed the blades and another team created the mechanical parts. She said it was nice to work with different groups and to see all different aspects of the engineering field come together. The project was a success and she found it a fun and mind blowing experience to see the outcomes.

Kalolin's most enjoyable project at Lindsay Construction was last summer where they participated in building eight new homes in Fox Harbour Golf Community on the Northumberland Shore in Nova Scotia. Kalolin was able to see how everything worked from the beginning stages to the final product. She said it was very busy and it was important to be very organized. She had to be onsite at least once a week to see how things were progressing and to alleviate any problems or issues.

Her favorite part of her degree in Civil Engineering is the networking. She is Vice President of the Civil Engineering Society and attends lots of meetings, collaborates with the overall society and networks with them. She hosts large events with other Engineers and learns about their field. She said it is great to hear about other people's backgrounds and realize the various paths and fields you can choose with your degree. She said it's a very versatile field and the students are very friendly and collaborative. She said "if you like working independently and in a team it's a great field for you".

At her summer job at Lindsay Construction, her favorite part is seeing all the stages of the project, from the beginning to the end and recognizing just how much goes into it. She said "it's amazing to see how you go from dirt to an elaborate building"!

What surprised Kalolin about her degree in Civil Engineering is how many students experienced similar situations, struggles, doubts and concerns as she did but if you work hard, you can succeed.

Career Impact

Kalolin's program of study in Civil Engineering helps society and communities by teaching you skills that you can use to help improve communities. For example, her first project was the construction of a travel centre in her home community that will bring income, job opportunities and other benefits.

Kalolin's degree will benefit her career by helping her gain the skills and abilities she needs to obtain her ideal career. She also said the program helps others determine whether this is the right career for them. The program is very intense so you have to be motivated and have a passion for it.

Kalolin's advice for a 14 year old female is to get really good at networking with other students, and people in the career you are pursuing.

Kalolin also advised to take care of your mental health as it's easy to only focus on your courses and become overwhelmed and stressed. She said to take care of yourself and take days for yourself. She said to get involved with other extracurricular activities such as societies or intramural sports to help develop other skills.

Kalolin's vision or dream for women in her field is to see a lot more females, especially Indigenous females, enter fields of STEM. She said "there is a need for them, and it feels great to be someone people from my culture can look up to and turn to for advice".

Kalolin is involved in the Women in Engineering Society and participated in women in engineering day where they talked to elementary students about engineering. They received great feedback from the young students who relayed they became interested in engineering as a result. She feels motivated and inspired to help the next generation of women to stay in the field. One of her goals is to share her knowledge and be a positive influence.

Cheyenne MacDonald

Climate and Agriculture Manager

Cheyenne MacDonald is a member of Sipekne'katik First Nation in Nova Scotia, which is a part of Mi'kma'ki Traditional Territory where she works with the eight mainland Mi'kmaq communities to support their Agriculture and Climate Change initiatives and goals.

Career/Educational Path

Cheyenne completed a Bachelor of Science in Plant Science but didn't start out with that intention. She started out in the Indigenous Student Access Pathway for Aboriginal students at Dalhousie's Agricultural Campus. She changed programs twice, first to Animal Science, then to Biology with a minor in Spanish, before finding her place in the Plant Science program.

Cheyenne also has a background as a licensed esthetician and is interested in topical and botanical medicines, skin creams, facial products, aromatic plants, essential oils. Cheyenne recommends doing lots of research on your education options and know what you want to do so you don't get overwhelmed by all the opportunities. She didn't realize there were so many different possibilities. She said she enjoyed it all, so nothing was a waste of time and she was glad for all the twists and turns along the way.

Cheyenne grew up in Enfield and is a Sipekne'katik First Nation band member.

On a daily basis, Cheyenne is responsible for building capacity through training opportunities, such as wilderness first aid certification, hiking guide training, shitake mushroom farming training, mushroom identification training, plant identification, outreach, networking, and attending conferences on Indigenous non-timber forest products and services. Cheyenne also engages with communities to find their interest in non-timber forest products (a forest that isn't timber – foods, mushrooms, strawberries, berries or medicines, herbal or Mi'kmaq traditional medicines and crafting materials, like quills, birch bark, sweet grass, animal hides).

Cheyenne attends meetings with CMM's internal departments and staff to discuss opportunities and projects for communities. She engages with the Health Department, Mi'kmawey Debert Cultural Department, Mi'kmawey Green Communities and Department of Aquatics Resources and Fisheries Management, NS Dept of Environment & Climate Change, NS Dept of Agriculture, Federation of Agriculture, Nova Scotia Community College (NSCC), Shubenacadie Wildlife Park, Ducks Unlimited, nonprofit organizations, and NS Indigenous Tourism Network (NSITEN).

Qualities and Skills

Qualities and skills that are a good fit for Cheyenne's career includes having a passion for the environment and how it works, the ability to work outdoors, computer literacy, good presentation skills, planning, prioritizing, project management, organization, teamwork, and communication skills, particularly the ability to work with Elders, youth and all the different community stakeholders.

Cheyenne would describe herself as outgoing, creative, artistic, a team player, kind-hearted, and wants to help others. She is an explorer, traveler, adventurer, and a critical thinker.

Career Highlight:

Cheyenne's most enjoyable project was when she was one of 52 Indigenous delegates from Canada, US and Hawaii at the Ocean Ops conference in Honolulu where they wrote the AHA HONUA Coastal Indigenous Peoples Declaration. The conference only happens every 10 years and this was the first time an Indigenous delegate was invited to participate.

Cheyenne also enjoyed being a co-facilitator for the public screening "Something in the Water" - a film produced by Elliot Page that examines environmental racism that Nova Scotian BIPOC communities face. She enjoyed the open discussion with attendees and PLFN Chief Andrea Paul, Michelle Denny and the Mi'kmaq Water Protectors and Grassroots Grandmothers.

According to Cheyenne, her favorite part of her job is working with Mi'kmaq communities to help support their needs and interests. She also really enjoys working outdoors, being creative, and travelling.

What surprised Cheyenne about her career are the wonderful opportunities there are out there for women in science or women who want to work outdoors. When she was in school, she didn't have any knowledge of these kind of careers.

Don't let fears hold you back. "If I can do it, anyone can do it". If you dedicate yourself to something, you have more chance of succeeding. It's not how smart you are, but how much you want it. "If you want it you can do it. "

Career Impact

Cheyenne's program of study - a Bachelor of Science in Agriculture with a major in Plant Science - helps her help society and communities by allowing her to lead projects which stem from community interest and needs. She also helped build the Seven Generations Trading Post cooperative business to provide economic opportunities for community members such as crafters, artisans, and farmers. She provides training opportunities to certify people in various things like hiking guides and wilderness first aid, mushroom, and plant identification.

Cheyenne's program of study benefited her career as it helped her develop knowledge of plants, agriculture, and non-timber forest products which directly relates to helping communities build gardens, greenhouses, and spaces for planting. The degree also helps her support Mi'kmaq people with their farm endeavors and supporting their long-term and short-term goals and interests.

Cheyenne's advice for 14 year old girls is to research what's out there, job shadow, ask questions, do some digging, and volunteer. Investigate what STEM activities are available to enroll in such as summer camps and retreats, or outdoor science opportunities. Learning about science options while you are young will have a bigger impact on where you want to go later and will give you more time to figure things out.

Cheyenne's vision or dream for women in her field for the next 25 years is that she would like to see more Indigenous people and women in the agriculture and forestry sector.

Questions to Ask Yourself Before Deciding on a Career

- What do you like to do in your spare time?
- What energizes you?
- What kind of environment would you like to work in? (ex. office, outdoors, a lab, etc.)
- What do you want to wear to work?
- How often do you want to change projects?
- What sorts of hours do you want to work?
- Do you want to travel?
- Would you like to work independently, or as part of a team?

Interested in a particular career? Ask a trusted adult if they know anyone who could talk to you about it.

Questions to ask a Role Model

- What attracted you to this field?
- What do you like most or least about this position or field?
- Describe a typical day or week?
- What steps did you take to break into this field?
- What skills are most helpful in your job? How can I develop them?
- To what professional associations do you belong?
- What advice would you give somebody interested in your line of work?

Useful Resources

- www.Wiseatlantic.ca - Mentor Videos; Posters, etc.
- www.Yourfreecareertest.com
- www.exploreengineering.ca/discover-engineering
- www.skillsns.ca - Skills Canada
- www.Techsploration.ca
- www.webtools.ncsu.edu/learningstyles/
- www.vark-learn.com (Questionnaire for Teens)
- www.univcan.ca/ - links to all of Canada's universities and colleges, accompanied by useful facts and statistics, as well as a searchable database of study programs
- www.cybermentor.ca (mentor stories)
- www.nscareeroptions.ca

Indigenous Opportunities to Explore

- www.canada.ca/en/public-service-commission/jobs/services/recruitment/students/federal-student-work-program.html - *federal student work experience program (FSWEP) which has indigenous student employment recruitment*
- www.msvu.ca/academics/professional-studies-at-the-mount/bsc-applied-human-nutrition/faculty-profiles/shannan-grant-pdt-msc-phd/nserc-promo-science-two-eyed-seeing-project/ - *Two Eyed Seeing Program - Mount Saint Vincent University*
- www.adventurecanada.com - *Students on Ice*
- www.canadianroots.ca/programs/ - *The Canadian Roots Exchange*
- www.ulnoowegeducation.ca/ - *UlnooweG Education Centre*

Career Competencies

Competencies are the knowledge, skills and attributes you can develop in every aspect of your life.

- Analytical
- Inquisitive
- Problem Solver
- Logical
- Observant
- Collaborative
- Persistent
- Organized
- Independent
- Creative
- Effective Communicator
- Planner
- Team Player

Doodle Page for You

Brainstorm images or words that you associate with your future.

About WISEatlantic

The Women in Science and Engineering - Atlantic Region (WISEatlantic) program aims to shift gendered STEM stereotypes. We empower girls to consider Science, Technology, Engineering and Math (STEM)-based careers by raising their awareness of the diversity of jobs within these fields, and enabling them to visualize themselves working in these fields. WISEatlantic also supports early career women in STEM through professional development and networking opportunities.

Women in Science and Engineering
NSERC CHAIR - ATLANTIC REGION

www.WISEatlantic.ca

For up-to-date information on events, resources and articles of interest, connect with us!

@WISEatlantic